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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,495	11/06/2003	Jean-Baptiste Galecy	232979US0	7627
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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER HENRY, MICHAEL C	
			ART UNIT 1623	PAPER NUMBER
			NOTIFICATION DATE 12/11/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/701,495

Applicant(s)

GALEY, JEAN-BAPTISTE

Examiner

MICHAEL C. HENRY

Art Unit

1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 10, 13, 19-21 and 24-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 10, 13, 19-21, 24-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The following office action is a responsive to the amendment filed, 09/10/09.

The amendment filed 09/10/09 affects the application, 10/701,495 as follows:

1. Claims 1, 10, 19 and 20 have been amended. New claims 24-31 have been added. Applicants' amendments have overcome the rejections under 35 U.S.C. 112, second paragraph. Consequently, the said rejections are withdrawn. However, the rejection made under 35 U.S.C. 103(a) of the prior office action mailed 06/11/09 is maintained.
2. The responsive to applicants' arguments is contained herein below.

Claims 1, 4, 10, 13, 19-21, 24-31 are pending in application

Claim Objections

Claim 1 is objected to because of the following informalities: The claim recites the phrase "in an amount of effective to provide" which appears to contain a typographical error. It appears that the word "of" should be deleted from the phrase. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 19, 20 and 24-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The abbreviations or terms "MECA" and "DPMA", in claims 19, 20 and 26, render the

claims indefinite. More specifically, it is unclear what the abbreviations or terms, MECA” and “DPMA” designates or means.

Claim 28 recites the phrase “wherein the composition further comprises at least one adenosine compound selected from the group consisting of adenosine”. However, the claim is indefinite since it is unclear how the composition can further comprise adenosine when independent claim 1 requires that the composition comprises adenosine.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 10, 13, 19-21, 24-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoenrock et al. (DE19545107 (A1), English Machine Translation).

Claim 1 is drawn to a method for softening expression lines on a face and/or forehead in need thereof, comprising topically applying to one or more zones of the face or forehead marked with expression lines a composition comprising a physiologically acceptable medium, and 0.1% to 10% by weight of adenosine with respect to the total composition weight, in an amount of effective to provide a relaxing effect on skin associated with the expression lines, thereby softening the expression lines. Claims 4 is drawn to said method wherein the composition comprises specific % by weight of adenosine with respect to the total composition weight. Dependent claims 10, 13, 19-21 are drawn to a method wherein the composition has a specific relaxing effect, specific % by weight of adenosine, the use of an adenosine analogue in the said

composition and the topical application to the skin an effective amount of said composition to reduce laugh lines and/or reduce frown lines. Claims 24-31 are drawn to said method wherein the composition further comprises specific compounds, wherein the composition provides relaxing effects on dermal cells associated with the expression lines, the expression lines are of specific type and wherein specific %wt of adenosine is used.

Schoenrock et al. disclose a method of increasing cell proliferation in human skin or combating and easing the symptoms of exogenous skin aging by applying adenosine (especially in cosmetic and dermatological preparations) to the skin (see abstract, description and claims). Furthermore, Schoenrock et al. disclose that adenosine can be used in concentrations from 0.01% to 10 % (see claims and description). In addition, Schoenrock et al. disclose or suggest that adenosine analogue such as cAMP can be used as a skin humidity increasing substance (see description). It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, "expression lines" are referred to as types of wrinkles. That is, expression lines are wrinkles. Applicant's attention is drawn to Exhibit A and B which disclose that expression lines are forms of wrinkles. Exhibit A states that "The wrinkles that seem to bother us most are "character" or "expression" lines" (see page 1, 1st line of 2nd paragraph). In addition, Exhibit B states that "Natural expressions that use specific facial muscles may cause some wrinkles called "expression lines" to reappear" (see page 4, 2nd paragraph, lines 2-3). Thus, these exhibits disclose that expression lines are wrinkles. It must also be noted that Schoenrock et al. apply the same composition to the skin of the same subject as applicant and consequently it should have the same inherent effect of softening of expression lines. Schoenrock

et al.'s composition also reduces or treats wrinkles (symptoms of aging skin) which includes frown lines and laugh lines-types of wrinkles and contains adenosine. It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, Applicant's attention is drawn to Exhibit C which discloses that expression lines and frown lines are different forms of wrinkles (i.e., dynamic wrinkles). For example, Exhibit C states that "Dynamic wrinkles typically form across the **forehead**, between the eyebrows (**frown lines**), and on the sides of the eyes ("crow's feet") (see page 1, 2nd paragraph and entire article).

The difference between applicant's claimed method and the method of Schoenrock et al. is that Schoenrock et al. do not disclose softening expression lines on a face and/or forehead, per se. However, Schoenrock et al. disclose that the adenosine can be used to treat the symptoms of exogenic skin aging which suggest or implies that adenosine (especially in cosmetic and dermatological preparations) can be used to treat dryness, itchiness, thinning or thickening of the skin, wrinkles and fine lines, areas of hyperpigmentation (called age or liver spots), and a mottled appearance which are the symptoms of skin aging.

It would have been obvious to one having ordinary skill in the art, at the time the claimed invention was made to have used the method of Schoenrock et al. to treat the symptoms of aging skin such as wrinkles or expression lines on said face and/or forehead with a composition comprising adenosine, and to use different % by weight of adenosine at the required location, based on factors like the severity of the skin or facial condition (such as wrinkles or expression lines), and the kind of subject or mammal being treated.

One having ordinary skill in the art would have been motivated to use the method of Schoenrock et al. to treat the symptoms of aging skin such as wrinkles or expression lines on said face and/or forehead with a composition comprising adenosine, and to use different % by weight of adenosine at the required location, based on factors like the severity of the skin or facial condition (such as wrinkles or expression lines), and the kind of subject or mammal being treated. Also, it should be noted that it is obvious to further add other compounds or substances to said composition such as compounds or substances that increases the amount or levels intra- or extra-cellular adenosine, agonist of an adenosine receptor, adenosine salts and derivatives.

Response to Arguments

Applicant's arguments with respect to claims 1, 4, 10, 13, 19-21, 24-31 have been considered but are not found convincing.

The applicant argues that Schoenrock relates to treating exogenous signs of skin aging caused by external factors such as UV light and chemicals. (See, page 1, third paragraph of Schoenrock). However, Schoenrock et al. disclose a method of increasing cell proliferation in human skin or combating and easing the symptoms of exogenic skin aging by applying adenosine (especially in cosmetic and dermatological preparations) to the skin (see abstract, description and claims). Furthermore, Schoenrock et al. disclose that adenosine can be used in concentrations from 0.01% to 10 % (see claims and description). In addition, Schoenrock et al. disclose or suggest that adenosine analogue such as cAMP can be used as a skin humidity increasing substance (see description). It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, "expression lines" are

referred to as types of wrinkles. That is, expression lines are wrinkles. Applicant's attention is drawn to Exhibit A and B which disclose that expression lines are forms of wrinkles. Exhibit A states that "The wrinkles that seem to bother us most are "character" or "expression" lines" (see page 1, 1st line of 2nd paragraph). In addition, Exhibit B states that "Natural expressions that use specific facial muscles may cause some wrinkles called "expression lines" to reappear" (see page 4, 2nd paragraph, lines 2-3). Thus, these exhibits disclose that expression lines are wrinkles. It must also be noted that Schoenrock et al. apply the same composition to the skin of the same subject as applicant and consequently it should have the same inherent effect of softening of expression lines. Schoenrock et al.'s composition also reduces or treats wrinkles (symptoms of aging skin) which includes frown lines and laugh lines-types of wrinkles and contains adenosine. It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, Applicant's attention is drawn to Exhibit C which discloses that expression lines and frown lines are different forms of wrinkles (i.e., dynamic wrinkles). For example, Exhibit C states that "Dynamic wrinkles typically form across the **forehead**, between the eyebrows (**frown lines**), and on the sides of the eyes ("crow's feet") (see page 1, 2nd paragraph and entire article).

The applicant argues that as Applicant has previously demonstrated in discussing Exhibits A-C of record in this case, expression lines differ from other wrinkles such as those caused by external factors such as UV light (sun damage), and expression lines are "difficult to treat." This is supported by the discussion in the present application at pages 2-3 which states that expression lines are produced by mechanisms which differ from the mechanisms associated

with aging lines (that is, expression lines are caused by the stress exerted on skin by the muscles which produce facial expressions, whereas aging lines are not), and that typical aging treatments do not have an effect on expression lines. Thus, merely because a reference might disclose methods of treating other types of less difficult-to-treat wrinkles such as those caused by UV light, it does not mean that such a reference (directed to a different type of wrinkle) teaches or suggests anything about how to treat expression lines. In other words, for example, a disclosure related to treating wrinkles caused by sun damage or UV light cannot teach or suggest how to treat expression lines, which are recognized as being different, more difficult-to-treat types of wrinkles.

However, the mechanism or manner by which the expression lines are produced does not alter the fact that it is a wrinkle or a type of wrinkle and that Schoenrock et al. use the same composition or compound on the skin as applicant. Also, it should be noted that the method of applicant's previously presented dependent claims 21 and 22 involves decreasing wrinkles with the same said composition as Schoenrock et al. This implies that the applicant also considers expression lines as been wrinkles (see previously presented claims 21 and 22 of the instant invention). It addition, it should be noted that the symptoms of aging skin include wrinkles (e.g., expression lines). Moreover, Schoenrock et al. disclose a method of increasing cell proliferation in human skin or combating and easing the symptoms of exogenic skin aging by applying adenosine (especially in cosmetic and dermatological preparations) to the skin (see abstract, description and claims). Furthermore, Schoenrock et al. disclose that adenosine can be used in concentrations from 0.01% to 10 % (see claims and description). In addition, Schoenrock et al. disclose or suggest that adenosine analogue such as cAMP can be used as a skin humidity

increasing substance (see description). It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, "expression lines" are referred to as types of wrinkles. That is, expression lines are wrinkles. Applicant's attention is drawn to Exhibit A and B which disclose that expression lines are forms of wrinkles. Exhibit A states that "The wrinkles that seem to bother us most are "character" or "expression" lines" (see page 1, 1st line of 2nd paragraph). In addition, Exhibit B states that "Natural expressions that use specific facial muscles may cause some wrinkles called "expression lines" to reappear" (see page 4, 2nd paragraph, lines 2-3). Thus, these exhibits disclose that expression lines are wrinkles. It must also be noted that Schoenrock et al. apply the same composition to the skin of the same subject as applicant and consequently it should have the same inherent effect of softening of expression lines. Schoenrock et al.'s composition also reduces or treats wrinkles (symptoms of aging skin) which includes frown lines and laugh lines-types of wrinkles and contains adenosine. It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, Applicant's attention is drawn to Exhibit C which discloses that expression lines and frown lines are different forms of wrinkles (i.e., dynamic wrinkles). For example, Exhibit C states that "Dynamic wrinkles typically form across the **forehead**, between the eyebrows (**frown lines**), and on the sides of the eyes ("crow's feet") (see page 1, 2nd paragraph and entire article).

The applicant argues that by way of analogy, baldness can be caused by different mechanisms such as, for example, alopecia or testosterone-related baldness. However, whereas

testosterone-related baldness might be treatable using compounds which inhibit testosterone production or inhibit conversion of testosterone to active forms, alopecia cannot be treated using such compounds. Thus, although the effect (baldness) is the same, treatment methods are not interchangeable for the different types of baldness.

However, Schoenrock et al. disclose a method of increasing cell proliferation in human skin or combating and easing the symptoms of exogenic skin aging by applying adenosine (especially in cosmetic and dermatological preparations) to the skin (see abstract, description and claims). Furthermore, Schoenrock et al. disclose that adenosine can be used in concentrations from 0.01% to 10 % (see claims and description). In addition, Schoenrock et al. disclose or suggest that adenosine analogue such as cAMP can be used as a skin humidity increasing substance (see description). It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, "expression lines" are referred to as types of wrinkles. That is, expression lines are wrinkles. Applicant's attention is drawn to Exhibit A and B which disclose that expression lines are forms of wrinkles. Exhibit A states that "The wrinkles that seem to bother us most are "character" or "expression" lines" (see page 1, 1st line of 2nd paragraph). In addition, Exhibit B states that "Natural expressions that use specific facial muscles may cause some wrinkles called "expression lines" to reappear" (see page 4, 2nd paragraph, lines 2-3). Thus, these exhibits disclose that expression lines are wrinkles. It must also be noted that Schoenrock et al. apply the same composition to the skin of the same subject as applicant and consequently it should have the same inherent effect of softening of expression lines. Schoenrock et al.'s composition also reduces or treats wrinkles (symptoms of aging skin)

which includes frown lines and laugh lines-types of wrinkles and contains adenosine. It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, Applicant's attention is drawn to Exhibit C which discloses that expression lines and frown lines are different forms of wrinkles (i.e., dynamic wrinkles). For example, Exhibit C states that "Dynamic wrinkles typically form across the **forehead**, between the eyebrows (**frown lines**), and on the sides of the eyes ("crow's feet") (see page 1, 2nd paragraph and entire article). Thus, a comparison of baldness to wrinkles (two distinctly different conditions) is especially irrelevant.

The Applicant argues that Schoenrock does not teach or suggest softening expression lines by applying adenosine thereto. Rather, Schoenrock teaches treating wrinkles or damaged skin caused by UV light or chemicals. Again, as explained in the present specification (pages 2-4), the conditions treated by Schoenrock are different from expression lines: their causes are different and their treatments are different. For example, whereas wrinkles are caused by lack of collagen and can be addressed through collagen protection and/or synthesis, expression lines are caused by different mechanisms and cannot be addressed by increasing or protecting collagen. Thus, although Schoenrock teaches addressing collagen-related conditions such as wrinkles, it neither teaches nor suggests reducing or softening conditions unrelated to collagen levels. Because expression lines are not collagen-related, Schoenrock could not possibly teach or suggest anything concerning treatment of this condition.

However, Schoenrock et al. disclose a method of increasing cell proliferation in human skin or combating and easing the symptoms of exogenic skin aging by applying adenosine

(especially in cosmetic and dermatological preparations) to the skin (see abstract, description and claims). Furthermore, Schoenrock et al. disclose that adenosine can be used in concentrations from 0.01% to 10 % (see claims and description). In addition, Schoenrock et al. disclose or suggest that adenosine analogue such as cAMP can be used as a skin humidity increasing substance (see description). It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, "expression lines" are referred to as types of wrinkles. That is, expression lines are wrinkles. Applicant's attention is drawn to Exhibit A and B which disclose that expression lines are forms of wrinkles. Exhibit A states that "The wrinkles that seem to bother us most are "character" or "expression" lines" (see page 1, 1st line of 2nd paragraph). In addition, Exhibit B states that "Natural expressions that use specific facial muscles may cause some wrinkles called "expression lines" to reappear" (see page 4, 2nd paragraph, lines 2-3). Thus, these exhibits disclose that expression lines are wrinkles. It must also be noted that Schoenrock et al. apply the same composition to the skin of the same subject as applicant and consequently it should have the same inherent effect of softening of expression lines. Schoenrock et al.'s composition also reduces or treats wrinkles (symptoms of aging skin) which includes frown lines and laugh lines-types of wrinkles and contains adenosine. It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, Applicant's attention is drawn to Exhibit C which discloses that expression lines and frown lines are different forms of wrinkles (i.e., dynamic wrinkles). For example, Exhibit C states that "Dynamic wrinkles typically form across the **forehead**, between the

eyebrows (**frown lines**), and on the sides of the eyes ("crow's feet") (see page 1, 2nd paragraph and entire article). In addition, the mechanism or manner by which the expression lines are produced does not alter the fact that it is a wrinkle or a type of wrinkle

The Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Henry whose telephone number is 571-272-0652. The examiner can normally be reached on 8.30am-5pm; Mon-Fri. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia A. Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael C. Henry
December 5, 2009.

/Shaojia Anna Jiang/
Supervisory Patent Examiner
Art Unit 1623